APPENDIX E

POLLUTANT LOAD REDUCTION WORKSHEET

Agricultural Fields and Filter Strips

Please fill in the gray areas below. Once you hae estimated the load reductions, print a copy of this worksheet and attach it to the 319A or 319U Cost-Share Form.

		Example
IDEM Project Manager:	NR	JA
Project ARN:	3-671	02-999
Landowner Initials:	Unknown	HJK
Date practices completed:	Future	8/8/2003

Please check which BMPs apply:

- ☐ Agricultural Field Practices
- ☑ * Filter Strips

Please select a state and a county, and default USLE parameter values will be entered.

State: Indiana

County: Elkhart

Please fill in the gray areas below:

USLE or RUSLE	Before Treatment	After Treatment	Example Before Treatment	Example After Treatment
Rainfall-Runoff Erosivity Factor (R)	160.00	160.00	**120**	**120**
Soil Erodibility Factor (K)	0.29	0.29	**0.35**	**0.35**
Length-Slope Factor (LS)	0.26	0.26	**0.44**	**0.44**
Cover Management Factor (C<=1.0)*	0.24	0.24	**0.7**	**0.5**
Support Practice Factor (P<=1.0)*	1.00	1.00	**0.775**	**0.11**
Predicted Avg Annual Soil Loss (ton/acre/year)	2.97	2.97	**10.03**	**1.02**

* User must use the local C and/or P values to obtain the reduction due to the field practices.

		Example
Enter contributing area (acres)	5	**14**

Please select a gross soil texture:

- ○ Clay (clay, clay loam, and silt clay)
- ○ Silt (silt, silty clay loam, loam, and silt loam)
- ◉ Sand (sand, sandy clay, sandy clay loam, sandy loam, and loamy sand)
- ○ Peat

Application of BMPs will change C and/or P values in the USLE, and may include (check BMP(s) that apply):

Prescribed Grazing
Residue Management, Mulch Till
Conservation Crop Rotation
Conservation Cover
Cover and Green Manure
Critical Area Planting
Stripcropping, Contour
Stripcropping, Field
Stripcropping, Field
* Filter Strips may further reduce sediment by 65%, phosphorous by 75%,

Estimated Load Reductions for Agricultural Field Practices

	Treated	Example
Sediment Load Reduction (ton/year)	0	**85**
Phosphorus Load Reduction (lb/year)	0	**100**
Nitrogen Load Reduction (lb/yr)	0	**200**

Estimated Additional Load Reductions through Filter Strips

	Filter Strips	Example
Sediment Load Reduction (ton/year)	7	**92**
Phosphorus Load Reduction (lb/year)	10	**114**
Nitrogen Load Reduction (lb/yr)	18	**227**

Total Estimated Load Reductions

	Total	Example
Sediment Load Reduction (ton/year)	7	**177**
Phosphorus Load Reduction (lb/year)	10	**214**
Nitrogen Load Reduction (lb/yr)	18	**427**

Pennsylvania State University. 1992. Nonpoint Source Database. In U.S. EPA, Guidance specifying management measures for sources of nonpoint pollution in coastal waters, page 2-15.

Agricultural Fields and Filter Strips

Please fill in the gray areas below. Once you hae estimated the load reductions, print a copy of this worksheet and attach it to the 319A or 319U Cost-Share Form.

		Example
IDEM Project Manager:	NR	JA
Project ARN:	3-671	02-999
Landowner Initials:	Unknown	HJK
Date practices completed:	Future	8/8/2003

Please check which BMPs apply:

☑ Agricultural Field Practices

☐ * Filter Strips

Please select a state and a county, and default USLE parameter values will be entered.

Indiana

County: Elkhart

Please fill in the gray areas below:

USLE or RUSLE	Before Treatment	After Treatment	Example Before Treatment	Example After Treatment
Rainfall-Runoff Erosivity Factor (R)	160.00	160.00	**120**	**120**
Soil Erodibility Factor (K)	0.15	0.15	**0.35**	**0.35**
Length-Slope Factor (LS)	0.26	0.26	**0.44**	**0.44**
Cover Management Factor (C<=1.0)*	0.51	0.20	**0.7**	**0.5**
Support Practice Factor (P<=1.0)*	1.00	1.00	**0.775**	**0.11**
Predicted Avg Annual Soil Loss (ton/acre/year)	3.21	1.26	**10.03**	**1.02**

* User must use the local C and/or P values to obtain the reduction due to the field practices.

		Example
Enter contributing area (acres)	124	**14**

Please select a gross soil texture:

- ○ Clay (clay, clay loam, and silt clay)
- ○ Silt (silt, silty clay loam, loam, and silt loam)
- ◉ Sand (sand, sandy clay, sandy clay loam, sandy loam, and loamy sand)
- ○ Peat

Application of BMPs will change C and/or P values in the USLE, and may include (check BMP(s) that apply):

Prescribed Grazing
Residue Management, Mulch Till
Conservation Crop Rotation
Conservation Cover
Cover and Green Manure
Critical Area Planting
Stripcropping, Contour
Stripcropping, Field
Stripcropping, Field
* Filter Strips may further reduce sediment by 65%, phosphorous by 75%,

Estimated Load Reductions for Agricultural Field Practices

	Treated	Example
Sediment Load Reduction (ton/year)	125	**85**
Phosphorus Load Reduction (lb/year)	133	**100**
Nitrogen Load Reduction (lb/yr)	266	**200**

Estimated Additional Load Reductions through Filter Strips

	Filter Strips	Example
Sediment Load Reduction (ton/year)	0	**92**
Phosphorus Load Reduction (lb/year)	0	**114**
Nitrogen Load Reduction (lb/yr)	0	**227**

Total Estimated Load Reductions

	Total	Example
Sediment Load Reduction (ton/year)	125	**177**
Phosphorus Load Reduction (lb/year)	133	**214**
Nitrogen Load Reduction (lb/yr)	266	**427**

Pennsylvania State University. 1992. Nonpoint Source Database. In U.S. EPA, Guidance specifying management measures for sources of nonpoint pollution in coastal waters, page 2-15.